

What is your New Years Resolution?

Exercising? Spending more time with family? Exploring Roanoke's great outdoors? Volunteering? Dieting?

At Roanoke Stormwater, we are keeping the City of Roanoke's waterways on a diet, a "pollution diet" that is. And you can help us keep them on track!

(No cheating on this one)

The Roanoke River and 11 of the 13 tributaries are currently impaired for exceeding safe bacterial (E.coli), sediment, temperature and PCB levels. All surface waters that do not meet water quality standards are placed on a 303(d) list [http://www.deq.virginia.gov/Portals/o/DEQ/Water/WaterQualityAssessmen ts/IntegratedReport/2014/ir14 Appendix5 Category5 FactSheets-RoaYad.pdf] impaired water list as mandated under the Clean Water Act. All impaired waters must have a Total Maximum Daily Load (TMDL) or "pollution diet" that establishes the limit of pollutants that a surface water body can receive daily and still meet water quality standards. The primary pollutant for most of the tributaries is bacteria (E. coli) that comes from pet waste, non-functioning septic and sewer systems, agriculture, and natural sources, like wildlife.

The Stormwater Division has created TMDL Action Plans outlining how it will meet the TMDL pollution reduction diet and work toward delisting our impaired streams. But we can't do it alone! Community engagement in this process is vital to successful delisting of our streams. Every person's actions count!

Here are some helpful tips to remember:

- Scoop the Poop
- Don't Drip and Drive. Fix that Leak!
- "Leave" Them Alone: Lawn Leaf Management
- Don't pour FOG (fats, oils, and grease) down the drain

Learn more here

[http://www.roanokeva.gov/DocumentCenter/View/2244] about stormwater pollution and how you can help!

Explore Creeks to Peaks

Looking to find your next big adventure in Roanoke?

Did you know Roanoke was voted Best Adventure Town in the Blue Ridge! What adventures will you find in Roanoke? Will you explore the creeks or







do/outdoor-adventure/hiking-trails/] in the valley from the AT [https://www.visitroanokeva.com/things-to-do/outdooradventure/appalachian-trail/]to Mill Mountain

[http://roanokemountainadventures.com/wp-content/uploads/2014/12/Mill-Mtn-Map-New.pdf].

In Roanoke City there are 13 streams including the renowned Roanoke River. There are many ways you can explore the Roanoke River. You can access the Roanoke River by walking along the Roanoke River Greenway [http://www.arcgis.com/home/webmap/viewer.html? webmap=85ccf91d65fe4a45aa3eedbec54f8111&extent=-80.2098.37.1861,-79. 7027,37.421], stretching over eight miles, or dive right in at various water access points [http://www.roanokeriverblueway.org/plan-a-trip/bluewaymaps/1 throughout the city. Enjoy tubing, canoeing, kayaking, and even paddleboarding. How will you explore Roanoke? Don't know where to start? The Roanoke Outside Foundation is a great resource with tools to help you create your own journey by land or water. Create your own adventure today! [http://www.roanokeoutside.com/create-an-adventure/]





Adopt-A-Stream Program A volunteer opportunity awaits..

The Adopt-A-Stream Program [http://www.dcr.virginia.gov/other/environmenta <u>l-education-portable/environmental-</u> education/www.dcr.virginia.gov/environmentaleducation/adopt.html] is open for businesses, civic groups, churches, neighborhood associations, schools, scouts, families and individuals to work together to become involved with helping Virginia'a environment. It all starts with you! The Virginia Department of Conservation and Recreation's Adopt-A-Stream Program aims to reduce litter while advancing citizen stewardship and understanding of the commonwealth's precious waterways.

Adopting a section of waterway is a great way to give back to your community and connect with your watershed. The program provides you with the resources for conducting cleanups. It is easy to get started. Learn more by reading the Adopt-A-Stream manual

[http://www.dcr.virginia.gov/other/environmenta <u>l-education-portable/environmental-</u> education/www.dcr.virginia.gov/environmental-<u>education/document/aasmanul.pdf</u>]. Organize your group and pick a location. The Adopt-A-Stream Coordinator [mailto:sheila.barnett@dcr.virginia.gov] can work with your group to find a site. Apply [http://www.dcr.virginia.gov/form/DCR199-022.pdf]

Local organization in the City of Roanoke participates in the Adopt-A-Stream Program.

and you are all set!









adopted the section of the Roanoke River being from Wasena Park down to Smith Park. "The river is a major part of our business and city," states James Rivercomb, owner of Roanoke Mountain Adventures, "and we feel it is our responsibility to take an ownership mentality, as well as promote good stewardship of the resource."

"It is an exciting time with regards to the Roanoke River," continues James, "as attitudes and public perception are shifting from polluted, unusable river towards a viewpoint that see's it as a valuable resource that is ours to take care of and protect for now and future enjoyment and benefit. There is lots to be done in regard to cleaning up the river and promoting responsible use and we feel it is our responsibility as a business that relies on the river to be a part of that movement."

Looking for ways to save this year? Save big by calculating your water footprint!

The average American household uses 70 gallons of water per person per day! Calculate how much water is embedded into your daily activities, including what you wear, eat and drink. There are multiple ways you can save water, but first is it useful to know where your using the most water. At home, at the grocery store, or at the mall? Find out the best way you can save by calculating your water footprint!

Calculate your water footprint and save water with these helpful sites:

- 30BY30
- Virtual Water
- Water Use it Wisely

Conserving water saves you time, energy, and money. One easy way to save water and time is by taking shorter showers. Try showering for only 5 minutes. You can save up to 12.5 gallons of water per shower! Also saving you time to accomplish other activities. Water is <u>part of our everyday lives</u>. It takes water to create the power we use to drive our cars, transport our groceries, and run our toaster ovens. Virtually every source of electricity in a typical American home or manufacturing plant - whether it comes from hydroelectricity, coal, natural gas, nuclear, biofuels, or even concentrated solar -- also requires water. Lots of water. Therefore, saving energy saves water. When you save energy you are also saving money by reducing your water and energy bills!





Stay in Stream

The City of Roanoke -Climate Action Plan is published. [http://roanokeva.gov/D ocumentCenter/Home/V iew/7315]



Be safe and stay up-todate with winter weather announcements. [http://www.roanokeva. gov/documentcenter/vie w/3392]



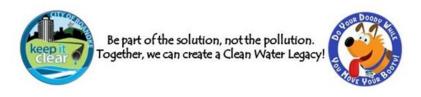






org/clean-valleyday.html]

Roanoke Bikeshare Service is coming soon! [http://theroanokestar.c om/2017/01/11/roanok e-bikeshare-service-iscoming-soon/]





f Share on Facebook



Share on Twitter



Share via Email

Copyright 2015, City of Roanoke, All Rights Reserved 215 Church Avenue, Roanoke VA 24011













Love the Roanoke River?

We do too, so remember to Scoop the Poop!

The City of Roanoke Stormwater Division is dedicated to reducing the amount of bacteria entering our waterways. One method to achieve this goal is to encourage pet owners to "Scoop the Poop."

There are approximately 7,000 dogs in the City of Roanoke, creating around 824,000 lbs of poop every year. That is enough to fill 34 dump truck loads or if you can image that is the same weight as one Boeing 747! That is a lot of bacteria that could be kept our of our streams! The City of Roanoke Stormwater Division along with the Parks and Recreation and Department [http://www.playroanoke.com/] are installing <u>Mutt-Mitt</u> [http://roanokeva.maps.arcgis.com/apps/webappviewer/index.html? id=2574d794576d4fc299eb8f7e04b35ea7]around the city to make it convenient for pet owners to grab a bag and dispose of pet waste properly. We all want our waterways to be healthy and we certainly do not want to step in it, so please pick-up after your pet.

Roanoke Stormwater is also partnering with local businesses to provide better and accessible locations for Mutt-Mitts. Recently Garland Properties [http://www.garlandpropertiesva.com/] worked with Roanoke Stormwater to encourage local residents to keep the streets and sidewalks clean by cleaning up after their pet. They installed two Mutt-Mitt stations downtown and distributed portable pet waste dispensers to residents. Aaron Garland, owner of Garland Properties, states "living in a small city makes it easy to know and communicate with your neighbors, city workers, and elected officials, and to allow you to easily effect change and solve local problems. This is one of the things that makes Roanoke a great place to live."

How can Roanoke Stormwater encourage others in your area to "Scoop the Poop?" Having a neighborhood, PTA, or church meeting? Roanoke Stormwater would like to be part of your next meeting in continuing to help educate others water quality issues. Email Roanoke Stormwater [mailto:stormwater@roanokeva.gov?

subject=Join%20us%20for%20our%20next%20meeting!] today and invite us to your next meeting. Be part of the solution not the pollution. Together, we can create a Clean Water Legacy!







If it's in our streets, it's in our streams. Join the Adopt-A-Street Program

As part of the City of Roanoke's "Clean and Green" initiative, civic and community groups, business organizations, and even families have joined the "Adopt-A-Street" Program to help reduce litter along the roadways, reducing trash from entering our waterways and making a major contribution towards the city's overall appearance and beautification efforts.



Cleaner & Healthier Environment

"Adopt-A-Street" participants tangibly demonstrate civic pride for their communities by contributing to a cleaner and healthier environment, and also contribute to our overall economic development. The activity of volunteers picking up litter and the signs also serve as impressive reminders to the public not to litter the roadways or ignore the environment.

Community Commitment

The "Adopt-A-Street" Program allows participants to make a 2 year commitment to collect litter along selected streets 4 times a year. The City of Roanoke recognizes the participants' commitment and concern for the environment with professional signage at each end of their designated area which identifies the group responsible for the clean-up of that particular roadway. The City provides 33-gallon orange trash bags and the use of High-Visibility Safety Vests.

Get Involved

Organizations interested in the "Adopt-A-Street" Program may become involved by contacting the City of Roanoke Transportation Division or the Municipal Volunteer Program (MVP), and begin by completing an "Adopt-A-Street" permit form. This permit allows the group members to pick up litter within the right-of-way of their designated area. For more information please email the Municipal Volunteer Coordinator or call 540-853-1801.

Become a Roanoke Riverkeeper Join the Citizen Science Water Monitoring **Program**

Do you love being outside? Are you fascinated by nature? Are you concerned about the health of your local watershed? Remember how fun it was to play in the creek as a kid? Consider becoming a volunteer stream monitor!











ecological health for the section of stream that is sampled.

You do not have to be a scientist to be a stream monitor; just be willing to learn and have

An informational meeting to learn more about this program will be hosted at the Raleigh Court Branch Library, February 28th at 6:30 pm. Sign-up today and bring a friend to learn $more\ about\ how\ you\ can\ participate\ in\ creating\ a\ Clean\ Water\ Legacy!$



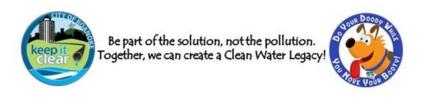
Stay in stream

Sign-up today for Clean Valley Day [http://www.cleanvall ey.org/clean-valleyday.html] April 1st



Roanoke Stormwater will see you at the Roanoke Valley SPCA Tail Chaser 5k & 1 Mile Fun Walk [http://rvspca.org/tai l-chaser-5k-1-milefun-walk/] March 25th

Find out what's coming to Roanoke! City of Roanoke **BizNews** [http://www.bizroano ke.com/RoanokeED/ media/BizNews-Publications/BizNews-Feb-2017.pdf]





¶ Share on Facebook



Share on Twitter



Mare via Email

Copyright 2015, City of Roanoke, All Rights Reserved 215 Church Avenue, Roanoke VA 24011















Water is life!

We often take that simple H2O for granted. We underestimate the value of water and how it is apart of our <u>everyday lives</u>. We use it for drinking, irrigation, household purposes, electricity, and recreational uses. Water is one of the most vital natural resources for life on Earth. Although there has been plenty of fresh water on Earth, water has not always been <u>available</u> when and where it is needed, nor is it always of suitable quality for all uses. Water does have limits and boundaries to its availability and suitability for use, so please remember to use <u>water wisely</u>.



Dive into these Upcoming Water Events:

March 14-26: DC Environmental Film Festival 25th Anniversary

March 19-25: Water Week in Washington D.C.

March 22: World Water Day

March 22 - December 31: The EarthEcho Water Challenge

April 1: Clean Valley Day

April 18: River Clean up with RMA

April 19: 48th Annual Water Is Life Conference and Luncheon

Fix a Leak Week is March 20-26. Detect And Chase Down Leaks

Did you know household water leaks can waste more than 1 trillion gallons of water annually nationwide. Inspecting your home inside and out can save valuable water and money all year long.



Finding and fixing leaks is easy as 1-2-3

1. Check Your Utility Bill

A place to start is to examine your utility bill for January or February. It's likely that a family of four has a serious leak problem if its winter water use exceeds 12,000 gallons (or 16CCF) per month. You can also look for spikes - is your water use a lot higher this month than it was last month? Learn more about your water bill: http://1.usa.gov/1Qw3Eg9.

2. Read Your Water Meter

Find your water meter, which is usually near the curb in front of your home but can be inside your home (e.g., in the basement) in cold climates. Use a screwdriver to remove the lid on your meter, which is heavy and usually marked "water." Now that you've found the meter, take a reading during a period when no water is being used. If the meter does not read exactly the same after two hours, you probably have a leak. Here's a tip on how to read a water meter: http://bit.ly/1TeYnMu.

3. Take a Toilet Test

Put a few drops of food coloring into the tank at the back of your toilet and let it sit for 10 minutes. If color shows up in the bowl, you have a leak. Make sure to flush afterward to avoid staining, and consider replacing your old toilet flapper if it is torn or worn.





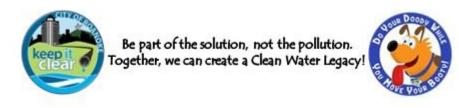
Stay in Stream

BizNews - March 2017

Climate Action Report

The Mountain Valley Pipeline and the Roanoke River







¶ Share on Facebook



Share on Twitter



Share via Email

Copyright 2015, City of Roanoke, All Rights Reserved 215 Church Avenue, Roanoke VA 24011





April is Keep Roanoke Beautiful Month



"Don't Throw Your Smokes in the NOKE!"



Help keep Roanoke clean and beautiful by recycling and properly disposing of trash. Litter discarded in the streets and parks can travel through the storm drain system, emptying into the nearest stream, polluting our environment. So let's remember, "Don't Throw Your Smokes in the NOKE!" 65 percent of all cigarettes butts end up as litter. That is why in 2015, the City of Roanoke joined forces with Roanoke County in a valley-wide

campaign to raise awareness about littering, in particular cigarette butts.

The city posted humorous anti-litter signs around downtown with creative slogans such as "Butt What", "No Butts About It" and "No Ifs, Ands or Butts". In October 2015 at a press conference held with Roanoke County, the second phase of the campaign was launched with the "Don't throw your smokes in the Noke!" featured Ford Explorer. The vehicle, which was provided by the Office of Environmental Management, is wrapped with the campaign slogan and bold graphics. Billboards, social media and the signs around town complete the campaign.

All littering is problematic but cigarette butts are the most frequently littered item. They are small and tend to collect in tight places making them and difficult to clean up. They can take up to 20 years to decompose. They present a particular hazard to our stormwater system and they pollute our parks, streets and waterways. So let's think twice before littering, find an appropriate container and keep Roanoke Clean & Green!





When it rains, it saves. Tips for installing a Rain Barrel.

Rain water can be collected and utilized later for various tasks around the house. Think of all the outdoor activities you use water; watering lawns and gardens, washing the car and dog, or cleaning outdoor furniture. The EPA estimates that the average American family uses 320 gallons of water per day, about 30 percent of which is devoted to outdoor uses. You can save money towards your water bill and stormwater fee by installing a rain barrel and collecting rain water.

Here's How to Build Your Own Rain Barrel:

Step 1: Install the faucet: Drill a 3/4" hole a few inches above the bottom of the barrel. Screw a 3/4" brass faucet/hose bib into the barrel and secure it with 3/4" nuts or washers. Seal the opening with silicone waterproof caulk.

Step 2: Make an opening for the downspout diverter: Cut a hole in the lid of the barrel, a little larger than the size of the diverter. Cut a piece of fiberglass window screen to cover the top of the barrel and secure it in place with plastic strapping or with the barrel lid. The screen will keep out debris and mosquitoes.

Step 3: Position the barrel: Place the barrel on a sturdy stand or cinder block base, elevated for easy access to the faucet and to increase gravity flow. Be sure it is located for convenient use on flower beds.

Step 4: Install a downspout flow diverter: Cut an 8" to 12" section of the downspout just above the level of the diverter. Attach the diverter to the upper portion of the downspout and to the top opening of the barrel. Attach the overflow spout of the diverter to the lower portion of the downspout. Make sure the bottom portion of the downspout empties the overflow away from the building foundation and paved areas.

Check out these helpful websites for additional information on rain barrels:

- Soak Up the Rain: Rain Barrels
- Build Your Own Rain Barrel
- Installing A Rain Barrel
- Rain Barrels and Harvesting Rain Water



Stay in Stream

Single-Stream Recycling Information

Green Organizations in Roanoke

Volunteer Positions <u>Available</u>





Be part of the solution, not the pollution. Together, we can create a Clean Water Legacy!





Share on Facebook



Share on Twitter



Share via Email



